

# The Habitat Melbourne Trust

Facilitator - Coordinator: Ross Mellor  
Board: Prof Allan Rodger (Chairman), Stan Cox, Ken King (Secretary), Fred Maddern  
Research Officer: Anna Mellor  
Consultant: Steve Axford of AXOS Urban



## **The Hon. Daniel Andrews MP.**

Premier of Victoria,  
Parliament House,  
Melbourne.

8<sup>th</sup> January 2015

Dear Mr Premier,

I write as Chairman of the Habitat Melbourne Trust. For nearly forty years this not-for-profit organisation has operated as a think-tank focused on advancing the public good. Though it has been located in the Western Suburbs its thinking and activities have extend across the metropolitan area, out into its multi-state hinterlands and internationally.

My purpose is to present to you and your colleagues our latest thinking about Metropolitan Melbourne's urban transport infrastructure and in particular its role as a critically important national logistics hub. Our proposition is set out in the attached document - "Towards a 21st Century Transport System for Victoria: Logistics and Primary Freight". While ostensibly logistics is a discrete part of the overall transport role the implications extend across all transport systems and deep into the social and economic fabric of Victoria. As such it has greatly influenced the current form and operating characteristics of present day Melbourne and can be expected to play a continuing role in future urban and regional planning and development. Because of this I have copied this e-mail and its attachment to the following Ministers

- Tim Pallas, Treasurer: Logistics has been and will continue to be a primary generator of the economic well-being of Metropolitan Melbourne and Victoria. There are inevitably massive economic and financial implications.
- Jacinta Allen, Public Transport: The current logistics industry occupies a substantial share of the carrying capacity of the road system and therefore interacts with all public transport.
- Jill Hennessy, Health and Ambulance Services: Cabinet Minister

and member for an electorate deeply involved in and affected by the logistics industry.

- Wade Noonan, Police and Corrections: Cabinet Minister and local member representing the metropolitan region that is most degraded, socially and environmentally, by the impact of the present logistics system.
- Richard Wynne, Minister for Planning: The logistics industries plays a major role in establishing transport patterns and establishes the location of major urban planning and development opportunities.
- Jaala Pulford, Agriculture and Regional Development: The logistics and servicing roles of Melbourne has driven urban and regional development since Melbourne's founding; these challenges and opportunities will increase in the future.
- Lily D'Ambrosio, Industry Energy and Resources: Logistics set the parameters within which industry and resources operate. The opportunity to transfer the logistics system to renewable sources of energy is a high priority objective of energy policy.
- Luke Donnellan, Road, and Ports: Removing Primary Freight from the existing road system opens new opportunities; redevelopment of dock technology and facilities underpins sustainable future wealth.
- Lisa Neville, Environment, Climate Change and Water: Removing Primary Freight from roads and transferring to electric power is highly beneficial for the social and physical environment while also preparing for a carbon constrained future.

For you, Mr Premier, our proposition may assist in establishing a coherent strategic approach to the urban and regional development of Victoria.

May I suggest that we meet briefly, say 15 minutes, to explore possibilities.

Yours Sincerely,

Allan Rodger,  
Chairman, Habitat Melbourne Trust

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## Towards a 21<sup>st</sup> Century Transport System for Victoria Logistics and Primary Freight

### The Background

From its earliest days Melbourne and its immediate surrounds have been the logistics hub for the development and operation of much of south and east Australia. In addition to the flows of physical goods inwards and outwards Melbourne has also provided much of the social, educational, cultural, recreational, health and financial infrastructure for this region. As such it has a national role that extends well beyond the boundaries of the state within which it sits. Increasingly it extends its reach well beyond Australia.

With increasing interaction with Asia this role is expected to grow. Indeed the development of high quality primary and value added products into Asia depends on it. The Melbourne region therefore has a significant strategic role in the future development of continental Australia.

This role derives fundamentally from the geography and geology of south and eastern Australia; that is not going to change any time soon.

How then is Melbourne responding to this situation. How is it preparing for its future? Is it developing a 21<sup>st</sup> Century transport system that will serve it and Australia well far into the future? Unfortunately it seems to have been proceeding on the assumption that a process of undirected drift and incremental extension of the present systems will suffice. At best, in our rapidly changing world, this is dangerous.

Currently Melbourne services its logistics role in a way that commits very large volumes of heavy freight to and from the docks via the road network that also serves many other users. The system is ship to road and vice versa. This causes massive social, health, economic and environmental degradation. Its continuation commits one of the primary generators of Melbourne's well being and that of much of south and east Australia to further dependence on hydrocarbon fuels.

There have been aspirations to disengage from this system. Until recently about 15% of dock traffic was by rail. There was an aspirational target that this would be maintained even as the total amount of traffic increased. Current reality is that these hopes have been abandoned; virtually no freight

now enters or leaves the ports by rail. There has also been a long-term aspiration to develop inland ports providing customs and quarantine services. This is widely accepted as desirable but there has been no serious attempt to establish such facilities. Drift continues and the problems escalate with no better future in sight.

There are possibilities for confronting these major strategic issues but they require vision and some courage. How might a 20<sup>th</sup> Century logistics system work?

### **The Proposition**

Let us explore the idea of establishing inland ports connected to the docks by a dedicated, stand alone, primary freight transportation system that is either below ground or above grade level and thus avoids all interaction with any of the existing surface transport systems (pedestrian, cycle, road, rail, etc.) Such a system would be much less socially disruptive, less damaging to health, the economy and the environment. In effecting these benefits such a system would also release inner city land that is currently used for temporary freight storage and establish major centres elsewhere in the metropolitan area for development and value adding around the inland ports.

This scenario raises two distinct issues. Firstly, where might such a transportation system run and secondly what kinds of transportation technology might best serve?

This first question of the alignment of a suitable route is not as difficult to identify as might first appear. The current and historical realities together with the future expectations of the role of Greater Melbourne in south and east Australia indicate that the inland ports should be located to the west and the north with possible extensions around to the east. Transport corridors to these locations have already been clearly proposed or designated in relation to previously proposed projects.

### **Starting at the Port of Melbourne Docks**

Webb Dock was connected by rail till 1996. A suitable alignment for re-connecting across the river has been identified by the City of Melbourne (2007) and the Port of Melbourne. A relatively low level bridge (but high enough for recreational and commuter boats) can be located immediately to the west of the Bolte Bridge.

There is space for an east-west route along the north of Appleton and Swanston docks.

A low level crossing of the Maribyrnong River providing access to a tunnel under Footscray would connect all Port of Melbourne docks to inland ports in the west.

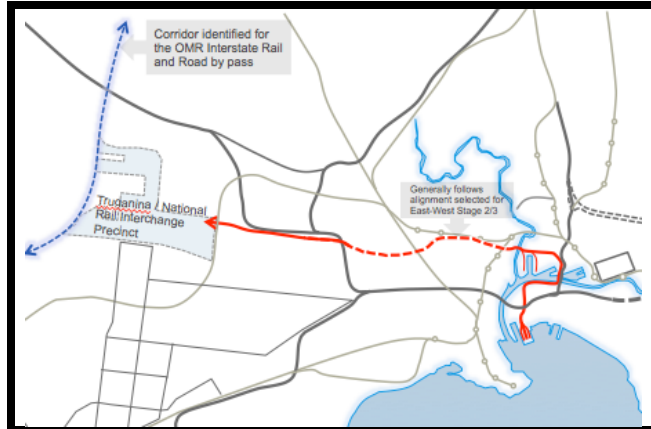


## Connecting to the West

The alignment for a major transport corridor to the west has already been identified. It is under Footscray and then overhead further to the west.

A further extension is required from the western ring road to the proposed outer ring transport corridor.

This connects directly with the National Rail Freight Interchange currently identified for Truganina.



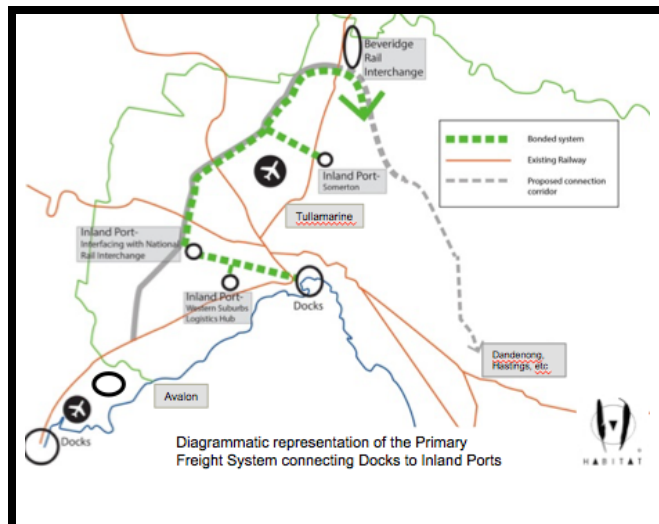
## Connecting the Docks to Inland Ports

This is a diagrammatic layout of the principal routes.

Inland ports would be located along this route to suit the logistics industries and the facilities that they serve.

Further extension south-east can connect into the docks in Geelong and any development of Bay West.

Extension to the east around the north of Metropolitan Melbourne can be accommodated along existing or proposed communications corridors.



## The Freight Transportation Vehicles

Various requirements must be met and various opportunities exist.

- ⦿ Vehicles suitable for transporting containerised freight must be powered from below so that the power supply system does not obstruct loading and unloading.
- ⦿ Electrical power creates very limited local noise and very little local air pollution from the rolling stock. The benefits of this are substantial when the line is operating above ground and very significant if tunnels are involved – there being only limited need for special ventilation equipment to remove exhaust fumes - with considerable savings in capital costs.

- ⦿ Consider a vehicle that could run on the rail or as a tracked vehicle and transition seamlessly from one to the other. For example, see Adelaide's existing O-Bahn. [O-Bahn Busway - Wikipedia, the free encyclopedia](#)
- ⦿ Standard freight containers are in two lengths: a 20-foot equivalent unit (1-TEU) and a 40-foot equivalent unit (1-FEU). A suitable freight carrying vehicle must be able to accommodate at least one FEU.
- ⦿ Short self-powered freight vehicles are capable of operating with relatively small turning circles and relatively steep grades thus facilitating easy integration with existing urban constraints – including the harbour crossing.
- ⦿ Such vehicles could readily be highly automated, self-managing and destination-seeking thus providing high levels of assurance and delivery on time. As appropriate they could run independently, fast and close together.
- ⦿ An electrically driven system can convert easily and progressively to reliable and sustainable sources of energy.

### **Primary Freight in Context**

This proposition focuses only on Greater Melbourne's primary freight and logistics. It does so recognizing that this is a matter of national strategic significance as well as being important to Melbourne and Victoria.

Primary freight is only one component of the overall freight requirement and freight is only part of the overall transport requirement. Removing primary freight from the road network is however a significant change and one that sets a pattern for how a sustainable long-term transportation system can be reimaged and pursued. It identifies that the systems that have served in the context of the past may not be appropriate or even possible in a growing Metropolitan Melbourne and south and east Australia. As such it challenges the community to reevaluate its systems and its future. The technologies and opportunities now available go far beyond those of the past. Can we now harness them to develop sustainable and convivial futures?

Allan Rodger  
Chairman, Habitat Melbourne Trust